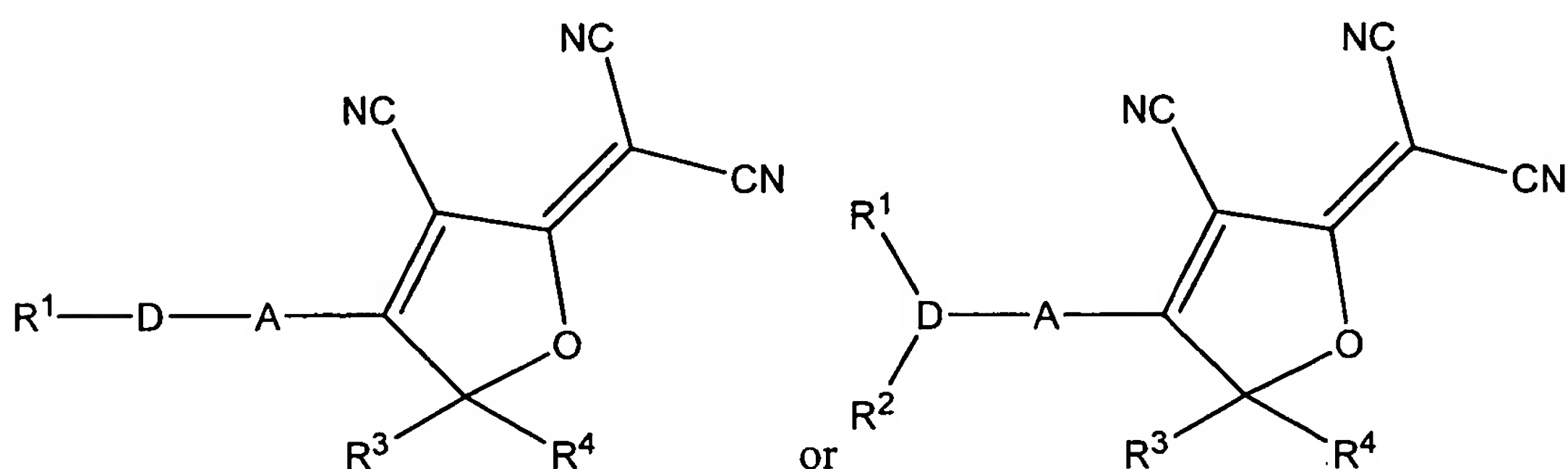


## AMENDMENTS TO THE CLAIMS

The following is a complete listing of the claims.

1-2. (Cancelled)

3. (Currently amended) ~~The composition of claim 1 wherein the donor group comprises an oxygen atom conjugated with A;~~ A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



wherein:

D is a donor group comprising an oxygen atom conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

$R^1$  is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

$R^2$  is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

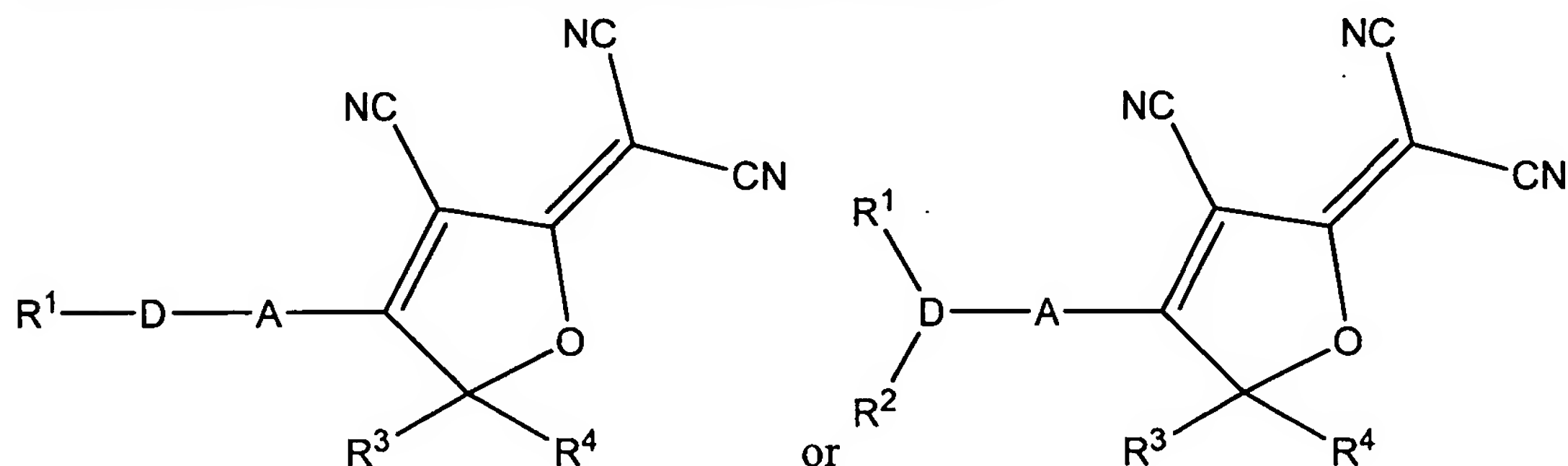
$R^3$  is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

$R^4$  is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine,  $R^3$  is methyl, and  $R^4$  is methyl).

4. (Currently amended) ~~The composition of claim 1, wherein the donor group comprises a sulfur atom conjugated with A~~ A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



wherein:

D is a donor group comprising a sulfur atom conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R<sup>1</sup> is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R<sup>2</sup> is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

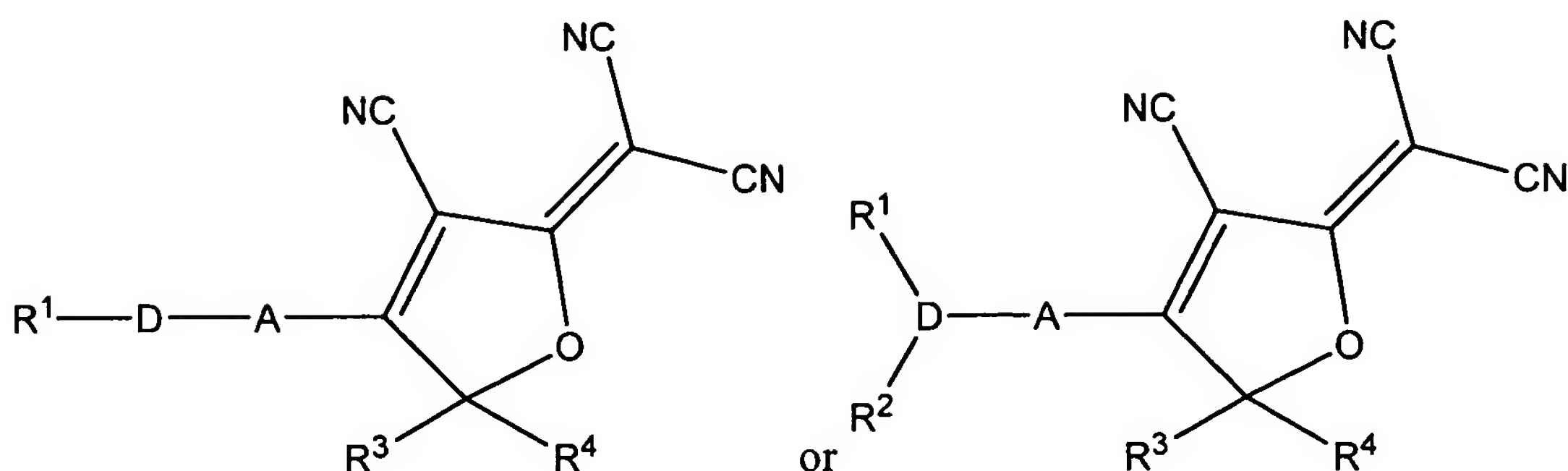
R<sup>3</sup> is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

R<sup>4</sup> is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R<sup>3</sup> is methyl, and R<sup>4</sup> is methyl).

5. (Currently amended) ~~The composition of claim 1, wherein the donor group comprises a phosphorous atom conjugated with A~~ A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



wherein:

D is a donor group comprising a phosphorous atom conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R<sup>1</sup> is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R<sup>2</sup> is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R<sup>3</sup> is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

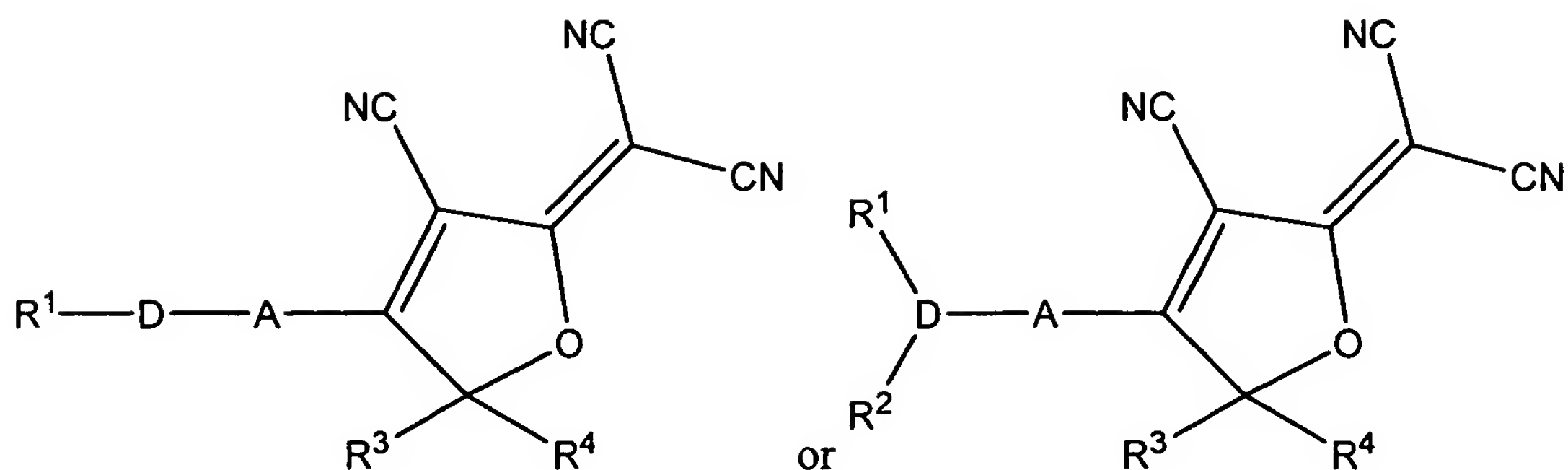
R<sup>4</sup> is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R<sup>3</sup> is methyl, and R<sup>4</sup> is methyl).

6-7. (Cancelled).

8. (Currently amended) ~~The composition of claim 1, wherein A is thiophene, furan, pyrrole, imidazole, pyrazole, oxazole, thiazole, diazole, oxadiazole, or thiadiazole~~ A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



wherein:

D is a donor group having at least one free electron pair conjugated with A;

A is thiophene, furan, pyrrole, imidazole, pyrazole, oxazole, thiazole, diazole, oxadiazole, or thiadiazole;

R<sup>1</sup> is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R<sup>2</sup> is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R<sup>3</sup> is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

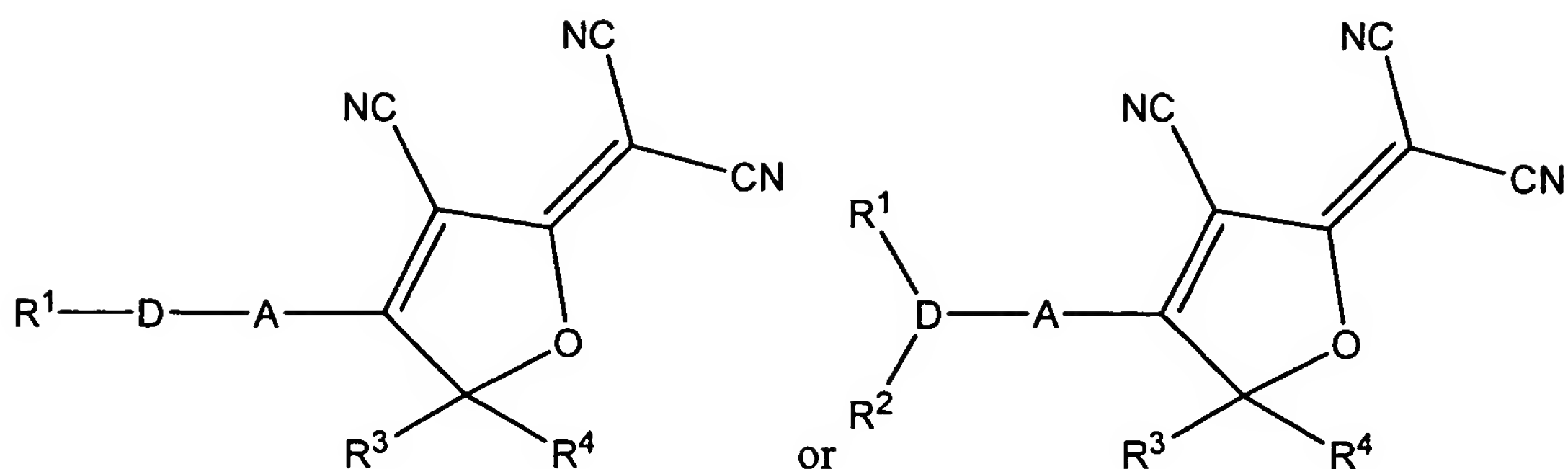
R<sup>4</sup> is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R<sup>3</sup> is methyl, and R<sup>4</sup> is methyl).

9. (Cancelled).

10. (Currently amended) The composition of claim 1, wherein A comprises a tolane group A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



wherein:

D is a donor group having at least one free electron pair conjugated with A;

A comprises a tolane group;

R<sup>1</sup> is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R<sup>2</sup> is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or hydrogen;

R<sup>3</sup> is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

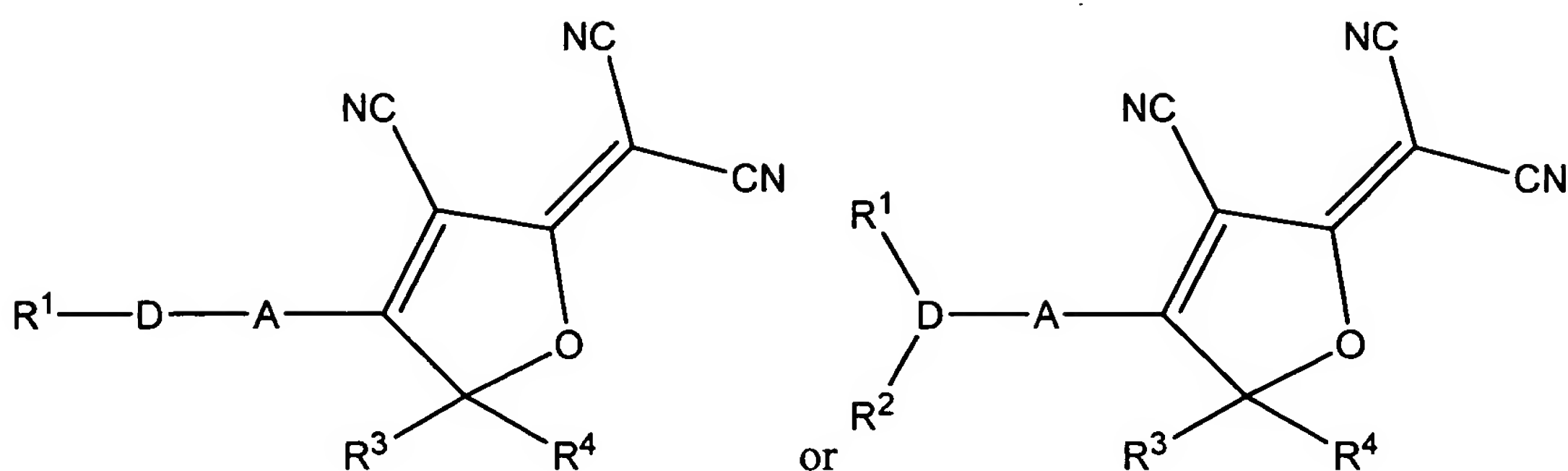
R<sup>4</sup> is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R<sup>3</sup> is methyl, and R<sup>4</sup> is methyl).

11. (Cancelled).

12. (Currently amended) ~~The composition of claim 1, wherein the alkoxy alkyl group is methoxymethyl, methoxyethyl, ethoxymethyl, or ethoxyethyl~~ A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



wherein:

D is a donor group having at least one free electron pair conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the 2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R<sup>1</sup> is an alkyl group, aromatic group, substituted aromatic group, methoxymethyl, methoxyethyl, ethoxymethyl, ethoxyethyl or hydrogen;

R<sup>2</sup> is an alkyl group, aromatic group, substituted aromatic group, methoxymethyl, methoxyethyl, ethoxymethyl, ethoxyethyl or hydrogen;

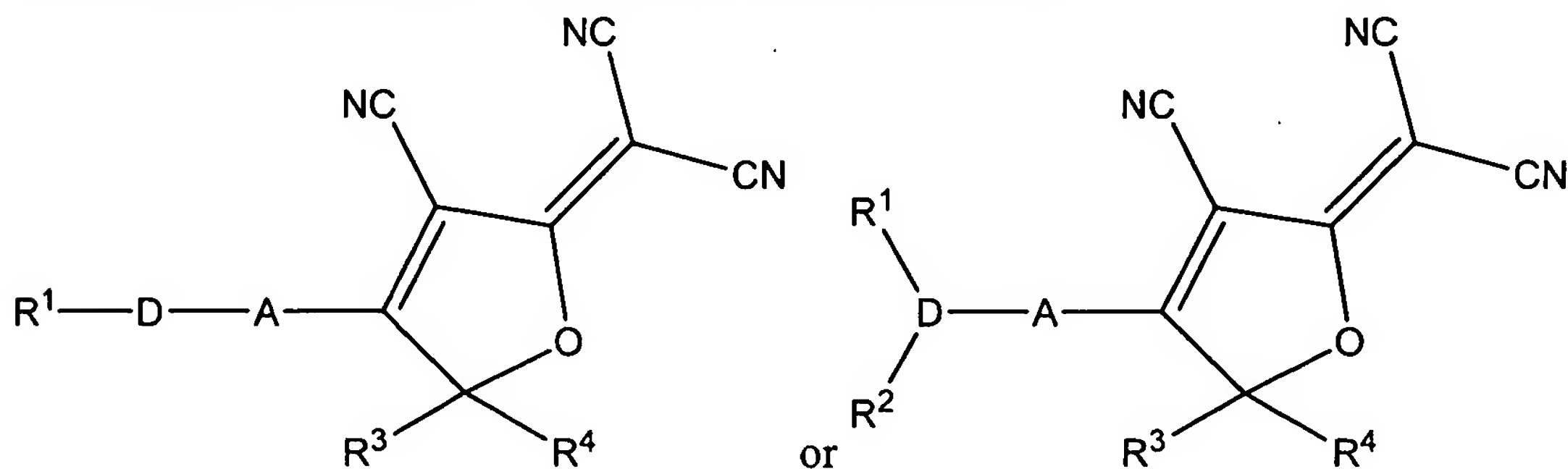
R<sup>3</sup> is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

R<sup>4</sup> is an alkyl group, fluoroalkyl group, aromatic group, or substituted aromatic group;

and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R<sup>3</sup> is methyl, and R<sup>4</sup> is methyl).

13. (Currently amended) ~~The composition of claim 1, wherein the fluoroalkyl group is trifluoromethyl or pentafluoroethyl~~ A composition comprising a fluorophore compound, the fluorophore compound having the chemical structure:



wherein:

D is a donor group having at least one free electron pair conjugated with A;

A is a moiety having at least one multiple bond conjugated with the donor group and the  
2-dicyanomethylen-3-cyano-2,5-dihydrofuran group;

R<sup>1</sup> is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or  
hydrogen;

R<sup>2</sup> is an alkyl group, alkoxy alkyl group, aromatic group, substituted aromatic group, or  
hydrogen;

R<sup>3</sup> is an alkyl group, aromatic group, substituted aromatic group, trifluoromethyl or  
pentafluoroethyl;

R<sup>4</sup> is an alkyl group, aromatic group, substituted aromatic group, trifluoromethyl or  
pentafluoroethyl; and

the fluorophore compound is not DCDHF-6 (2-[3-Cyano-4-(4-dihexylamino-phenyl)-5,5-  
dimethyl-5H-furan-2-ylidene]-malononitrile; where A is a benzene ring, D is dihexylamine, R<sup>3</sup> is  
methyl, and R<sup>4</sup> is methyl).

14-40. (Cancelled).